From: Dawson, Jeffrey[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=b7281288675c408d9667266072f0ae21-Jeffrey Dawson]

Importance: Normal

Subject: SFIREG PFAS

 Start Time:
 Tue 4/13/2021 3:30:00 PM (UTC)

 End Time:
 Tue 4/13/2021 5:00:00 PM (UTC)

Rhina,

Thanks very much for those updates and for providing the sent responses – very helpful!

All,

I've incorporated those responses and the remaining questions into the attached document. There are 20 questions in all and they're broken into three categories:

A. questions with cleared answers (10 Qs and As)

B. questions with drafted answers undergoing approval and may be approved by the 4/12 SFIREG meeting (4 Qs)

C. questions that need responses drafted and likely will not be approved by 4/12 (3 Qs).

Most questions would be addressed in the April 12, 1-2:45 PM PFAS session and only two were submitted for BEAD at the April 13, 11:30-1 PM session. For the first session, many questions seem a square fit for BEAD, but there are also questions best suited for RD and OECA.

During today's PFAS Check-in meeting, I promised to also send the link to join the SFIREG JWC GoToMeeting link, and am providing it here:

Ex. 6 Personal Privacy (PP)

I'm setting up a scheduler to reserve the PFAS times for folks in BEAD I know will be attending, and can also include some key names from this email chain as optional in case you'd like to pass on to staff in your office/division. There will likely need to be discussion on which office/division may cover questions at the SFIREG meeting.

Thanks for coordination on these PFAS questions and please let me know if I can further assist (for example, setting up a meeting to go over the questions).

Best,

Sandra O'Neill

AAPCO/SFIREG Project Officer and EPA Region and State Liaison

Environmental Protection Agency

Office of Chemical Safety and Pollution Prevention

Office of Program Support

Mission Support Division

Intergovernmental & Community Relations Branch

919 323 7926

From: Lara, Rhina < Lara.Rhina@epa.gov > Sent: Tuesday, April 6, 2021 10:52 AM

To: ONeill, Sandra < ONeill. Sandra@epa.gov>; Nesci, Kimberly < Nesci. Kimberly@epa.gov>; Goodis, Michael

< Goodis.Michael@epa.gov>; Dawson, Jeffrey < Dawson.Jeff@epa.gov>; Henry, Tala < Henry.Tala@epa.gov>

Cc: Nguyen, Thuy < Nguyen. Thuy@epa.gov>; Qian, Yaorong < qian.yaorong@epa.gov>; Rosenblatt, Daniel

<Rosenblatt.Dan@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Picone, Kaitlin <Picone.Kaitlin@epa.gov>;

Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Leifer, Kerry

<<u>Leifer.Kerry@epa.gov</u>>; Cyran, Carissa <<u>Cyran.Carissa@epa.gov</u>>

Subject: RE: SFIREG JWC Mtg: PFAS & Dicamba Questions for EPA

Hi Sandra,

Yes, I believe we should be able to get the responses for the second group of questions approved by April 12 since those are

already at the OCSPP IO level for review. As for the fourth group of questions, I can begin working on drafting those and going through the approval process, but I cannot guarantee we will have them ready to go by the SFIREG JWC. I will keep you updated.

Finally, here are the answers to the questions in the first group compiled in one document. These were approved and sent out through the PFAS packaging mailbox.

SFIREG JWC Questions - Sent

Best,

Rhina M. Lara (she/her/hers)
Communications Branch
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
Phone: (202) 815-5722

From: ONeill, Sandra < ONeill.Sandra@epa.gov>

Sent: Friday, April 2, 2021 1:43 PM

To: Lara, Rhina < Lara. Rhina@epa.gov >; Nesci, Kimberly < Nesci. Kimberly@epa.gov >; Goodis, Michael < Goodis. Michael@epa.gov >;

Dawson, Jeffrey < Dawson. Jeff@epa.gov>; Henry, Tala < Henry. Tala@epa.gov>

Cc: Nguyen, Thuy < Nguyen. Thuy@epa.gov>; Qian, Yaorong < qian.yaorong@epa.gov>; Rosenblatt, Daniel

<Rosenblatt.Dan@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Picone, Kaitlin <Picone.Kaitlin@epa.gov>;

Ozmen, Shamus < Ozmen.Shamus@epa.gov>; Aubee, Catherine < Aubee.Catherine@epa.gov>; Leifer, Kerry

<<u>Leifer.Kerry@epa.gov</u>>; Cyran, Carissa <<u>Cyran.Carissa@epa.gov</u>>

Subject: RE: SFIREG JWC Mtg: PFAS & Dicamba Questions for EPA

Greetings all,

A big thanks to Rhina for the PFAS questions breakdown! Can we assume that for the first group where responses were sent, those are already approved as well? Appreciate the offer to share those responses, I think it'd be good for BEAD/RD to have these if they don't already.

Sounds like we're good on the third group of questions that can be answered with existing questions as well.

For the 2nd group of questions, wondering if the 2nd group that's drafted might be approved by 4/12 when the SFIREG Joint Working Committee meeting takes place? If not, we could just inform that we're working on those.

For the 4th group where there are no drafts, I've noted the divisions I think might be lead (in blue below), but for the group, please feel free to correct! Here again, not sure if we'll get clearance in advance of the SFIREG JWC.

Lastly, we've received an updated draft agenda for the SFIREG Joint Working Committee meeting. There are two PFAS sessions, and I'll follow up with BEAD and OECA on thoughts for speakers at those sessions.

Many thanks and a happy Friday to all!

Sandra O'Neill

919 323 7926

From: Lara, Rhina < Lara.Rhina@epa.gov > Sent: Thursday, April 1, 2021 4:30 PM

To: ONeill, Sandra < ONeill.Sandra@epa.gov >; Nesci, Kimberly < Nesci.Kimberly@epa.gov >; Goodis, Michael

<<u>Goodis.Michael@epa.gov</u>>; Dawson, Jeffrey <<u>Dawson.Jeff@epa.gov</u>>; Henry, Tala <<u>Henry.Tala@epa.gov</u>>

Cc: Nguyen, Thuy < Nguyen. Thuy@epa.gov>; Qian, Yaorong < qian.yaorong@epa.gov>; Rosenblatt, Daniel

<Rosenblatt.Dan@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Picone, Kaitlin <Picone.Kaitlin@epa.gov>;

Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Aubee, Catherine <Aubee.Catherine@epa.gov>; Leifer, Kerry

<<u>Leifer.Kerry@epa.gov</u>>; Cyran, Carissa <<u>Cyran.Carissa@epa.gov</u>> **Subject:** RE: SFIREG JWC Mtg: PFAS & Dicamba Questions for EPA

Hi Sandra,

Thanks for sending these over. Looking at these questions, we have answered some of these in the past because they have come through our PFAS in Packaging inbox. I've divided the questions in categories so that we know what we have already worked on and what information is already out there.

Received through PFAS packaging inbox, response was sent – Let me know if you'd like me to share these responses with you.

- Will affected products be placed under Stop Sale/Stop Use by EPA or State Lead Agencies?
- Is there a Safety Data Sheet (SDS) for the packaging?
- After Anvil 10+10 is properly mixed (diluting the concentrate) and applied at the maximum label rate, what level of PFAS is making it into the environment?
- Will there be a foreseeable interruption in supply and inventory if the science leads to a change in fluorinated HDPE containers?
- What are the positions of other governments and trade partners, including Canada, Mexico, and the European Union, on PFAS? Are levels of concern or action levels established in other countries?
- What will this mean for export/import of agrichemical products? What will this mean for the import/export of agricultural crops that were treated with agrichemicals stored in fluorinated HDPE packaging?
- Other than Anvil 10+10, what other packaging/products are affected, including those that may go beyond the agrochemical industry such as in the food industry or homeowner products? Can a list be provided?

Received through PFAS packaging inbox, response drafted and undergoing approval process

- What is the definition of a PFAS compound in the context of pesticides?
- According to the EPA PFAS Master List, comprising a master list of PFAS chemicals,

https://comptox.epa.gov/dashboard/chemical_lists/pfasmaster_several pesticide active ingredients such as Lufenuron, Noviflumuron, Tetraconazole, Pyrifluquinazon are listed as PFAS chemicals, however the webpage states that there is no clear definition of PFAS chemical. An excerpt from the webpage: "There is no precisely clear definition of what constitutes a PFAS substance given the inclusion of partially fluorinated substances, polymers, and ill-defined reaction products on these various lists. Hence, PFASMASTER serves as a consolidated list of substances spanning and bounded by the below lists, defining a practical boundary of PFAS chemical space (within DSSTox) of current interest to researchers and regulators worldwide. This PFAS Master List will continue to expand as component lists grow. (Last Updated: September 16th 2020)". Are the active ingredients listed actually PFAS chemicals?

- What should be done with remaining stocks of Anvil 10+10? Can more information be provided on the registrant's response?
- Will there be a similar response from EPA regarding Permanone 30-30?

New questions that can be answered with existing language - no need to undergo approval process

• If PFAS contamination is confirmed to be linked to the fluorination process, what are the alternatives to fluorination or alternative types of rigid containers available to the agrochemical industry? **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

• Methods used for determination. Will BEAD be sharing their validated methods with states? Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

• EPA has indicated a "clean up" of PFAS in the Pesticide Inert Finder database as the database includes some PFAS compounds. EPA further indicated that even though these compounds were listed, they do not occur in currently registered pesticide products (this was information relayed in a presentation to Massachusetts mosquito control districts earlier this year). Could an update be given on the effort to clean up the inert database? **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

New questions that need responses drafted – will need to undergo the approval process

- Mixed messages between the Ft. Meade lab stating they need more data to draw any conclusions regarding PFAS coming from the container vs. action being taken on the containers and targeting them as the source of the PFAS.
- What containers are being purchased off the open market for additional testing by BEAD/Ft. Meade and are they the same level of fluorination as the initial container rinsate testing? If not, is there reason similar containers are not being used to perform the leaching studies?
- Are there continued considerations being given regarding SLA laboratories providing analytical support? If so, what are they?
- What consideration, if any, is being given to pesticide container recycling programs in regards to the fluorinated HDPE containers? Ex. 5 Deliberative Process (DP)
- EPA Methods 537.1 and 533 are established and being used with some differences between them. What methodology would be appropriate for testing?

Hope this helps in providing a status as to where we are with all of these inquiries. Let me know if you have any questions!

Best.

Rhina M. Lara (she/her/hers)
Communications Branch
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
Phone: (202) 815-5722

From: ONeill, Sandra < ONeill.Sandra@epa.gov > Sent: Wednesday, March 31, 2021 9:11 PM

To: Nesci, Kimberly Nesci, Kimberly@epa.gov">Nesci, Kimberly@epa.gov; Goodis, Michael Goodis.Michael@epa.gov; Dawson, Jeffrey

<<u>Dawson.Jeff@epa.gov</u>>; Henry, Tala <<u>Henry.Tala@epa.gov</u>>

Cc: Nguyen, Thuy < Nguyen. Thuy@epa.gov>; Qian, Yaorong < qian.yaorong@epa.gov>; Rosenblatt, Daniel

<<u>Rosenblatt.Dan@epa.gov</u>>; Echeverria, Marietta <<u>Echeverria.Marietta@epa.gov</u>>; Picone, Kaitlin <<u>Picone.Kaitlin@epa.gov</u>>;

Ozmen, Shamus < Ozmen. Shamus@epa.gov>; Aubee, Catherine < Aubee. Catherine@epa.gov>; Leifer, Kerry

<Leifer.Kerry@epa.gov>; Lara, Rhina <Lara.Rhina@epa.gov>

Subject: RE: SFIREG JWC Mtg: PFAS & Dicamba Questions for EPA

Thanks, Kimberly for the quick response and good question on clearances. For the SFIREG meetings, each division pursues clearance of any materials (talking points/presentations, etc.).

In the case of PFAS, since there's a mailbox set up for incoming questions, wondering if there might already be prepared responses to some of these questions (or similar questions).

Shamus/Rhina, might this be the case for any of the questions below? If so, would be a good to use any pre-cleared responses.

Thanks,

Sandra O'Neill

919 323 7926

From: Nesci, Kimberly < Nesci. Kimberly@epa.gov>

Sent: Wednesday, March 31, 2021 4:28 PM

To: Goodis, Michael <<u>Goodis.Michael@epa.gov</u>>; Dawson, Jeffrey <<u>Dawson.Jeff@epa.gov</u>>; Henry, Tala <<u>Henry.Tala@epa.gov</u>>; Cc: Nguyen, Thuy <<u>Nguyen.Thuy@epa.gov</u>>; Qian, Yaorong <<u>qian.yaorong@epa.gov</u>>; ONeill, Sandra <<u>ONeill.Sandra@epa.gov</u>>; Rosenblatt, Daniel <<u>Rosenblatt.Dan@epa.gov</u>>; Echeverria, Marietta <<u>Echeverria.Marietta@epa.gov</u>>; Picone, Kaitlin <<u>Picone.Kaitlin@epa.gov</u>>; Ozmen, Shamus <<u>Ozmen.Shamus@epa.gov</u>>; Aubee, Catherine <<u>Aubee.Catherine@epa.gov</u>>; Leifer, Kerry Leifer.Kerry@epa.gov>

Subject: FW: SFIREG JWC Mtg: PFAS & Dicamba Questions for EPA

FYI, we just rec'd from Sandra some advance questions from SFIREG on PFAS. I've added my initial thoughts in blue, and highlighted questions on which we'll need input from others (RD, OPPT, IO).

Sandra, I don't have any follow-up for SFIREG, but are you pursuing the process for formal clearance?

Thanks, Kimberly

From: ONeill, Sandra < ONeill.Sandra@epa.gov > Sent: Wednesday, March 31, 2021 1:53 PM

To: Nesci, Kimberly < Nesci.Kimberly@epa.gov >; Rosenblatt, Daniel < Rosenblatt.Dan@epa.gov >; Echeverria, Marietta

<<u>Echeverria.Marietta@epa.gov</u>>

Cc: Nguyen, Thuy < Nguyen. Thuy@epa.gov >; Qian, Yaorong < qian.yaorong@epa.gov >; Hathaway, Margaret < Hathaway. Margaret@epa.gov >; Schmid, Emily < Schmid. Emily@epa.gov >; Picone, Kaitlin < Picone. Kaitlin@epa.gov >

Subject: SFIREG JWC Mtg: PFAS & Dicamba Questions for EPA

Hi Kimberly, Marietta, Dan and all

As a follow-up to the 3/10 SFIREG Joint Working Committee walk-through meeting, SFIREG has sent questions for the PFAS and Dicamba sessions (SFIREG JWC to take place April 12-13). We've informed SFIREG that EPA goes through clearance processes for questions submitted in advance, and these may not have arrived in time to get senior level clearance. If that's the case for these questions, may be good to plan for a back pocket response appropriate for a public meeting, offering a full response at a later time to give time for clearances.

FYI: We have not yet received an updated agenda from SFIREG. We've also passed on Pentachlorophenol questions to AD.

Please let me know if you may have any questions/comments on the submitted questions and I'll coordinate with SFIREG.

Many thanks,

Sandra O'Neill

AAPCO/SFIREG Project Officer and EPA Region and State Liaison Environmental Protection Agency Office of Chemical Safety and Pollution Prevention Office of Program Support Mission Support Division Intergovernmental & Community Relations Branch 919 323 7926

PFAS

During the joint session on Monday, could EPA address the following:

• What is the definition of a PFAS compound in the context of pesticides?

EPA's Office of Pollution Prevention and Toxics applies the following "working definition" when identifying PFAS on the TSCA Inventory: a structure that contains the unit R-CF2-CF(R')(R''), where R, R', and R'' do not equal "H" and the carbon-carbon bond is saturated (note: branching, heteroatoms, and cyclic structures are included). (from response to Bloomberg)

 Mixed messages between the Ft. Meade lab stating they need more data to draw any conclusions regarding PFAS coming from the container vs. action being taken on the containers and targeting them as the source of the PFAS

Working hypothesis. EPA elected to take action considering the seriousness of PFAS and the fact that it should not be present in

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pesticide products.

- What containers are being purchased off the open market for additional testing by BEAD/Ft. Meade and are they the same level of fluorination as the initial container rinsate testing?
- If not, is there reason similar containers are not being used to perform the leaching studies?

We chose to purchase off of the open market at a first next step. We are still learning about fluorination, and what fluorination levels mean. We have not excluded targeting specific containers; early in investigation process.

- According to the EPA PFAS Master List, comprising a master list of PFAS chemicals, https://comptox.epa.gov/dashboard/chemical_lists/pfasmaster several pesticide active ingredients such as Lufenuron, Noviflumuron, Tetraconazole, Pyrifluquinazon are listed as PFAS chemicals, however the webpage states that there is no clear definition of PFAS chemical. An excerpt from the webpage: "There is no precisely clear definition of what constitutes a PFAS substance given the inclusion of partially fluorinated substances, polymers, and ill-defined reaction products on these various lists. Hence, PFASMASTER serves as a consolidated list of substances spanning and bounded by the below lists, defining a practical boundary of PFAS chemical space (within DSSTox) of current interest to researchers and regulators worldwide. This PFAS Master List will continue to expand as component lists grow. (Last Updated: September 16th 2020)". Are the active ingredients listed actually PFAS chemicals?
- EPA has indicated a "clean up" of PFAS in the Pesticide Inert Finder database as the database includes some PFAS compounds. EPA further indicated that even though these compounds were listed, they do not occur in currently registered pesticide products (this was information relayed in a presentation to Massachusetts mosquito control districts earlier this year). Could an update be given on the effort to clean up the inert database?
- What should be done with remaining stocks of Anvil 10+10? Can more information be provided on the registrant's response?
- Will there be a similar response from EPA regarding Permanone 30-30?

Ex. 5 Deliberative Process (DP)

DPP understands that other packaging/products may be affected (20% of ag products packaged in fluorinated HDPE). Investigating
what other packaging/products are affected (OPPT?)
• Will affected products be placed under Stop Sale/Stop <u>Use by EPA or State Lead Agencies?</u> TBD, EPA exploring all options.
Is there a Safety Data Sheet (SDS) for the packaging?
• If PFAS contamination is confirmed to be linked to the fluorination process, what are the alternatives to fluorination or
alternative types of rigid containers available to the agrochemical industry? Ex. 5 Deliberative Process (DP)
Ex. 5 Deliberative Process (DP)

- After Anvil 10+10 is properly mixed (diluting the concentrate) and applied at the maximum label rate, what level of PFAS is making it into the environment? [Ex. 5 Deliberative Process (DP)]
- Will there be a foreseeable interruption in supply and inventory if the science leads to a change in fluorinated HDPE containers? Ex. 5 Deliberative Process (DP)
- What are the positions of other governments and trade partners, including Canada, Mexico, and the European Union, on PFAS? Are levels of concern or action levels established in other countries?
- What will this mean for export/import of agrichemical products? What will this mean for the import/export of agricultural crops that were treated with agrichemicals stored in fluorinated HDPE packaging?
- Are there continued considerations being given regarding SLA laboratories providing analytical support? If so, what are they?
 Ex. 5 Deliberative Process (DP)

 Ex. 5 Deliberative Process (DP)
- What consideration, if any , is being given to pesticide container recycling programs in regards to the fluorinated HDPE containers?

During the EQI breakout on Tuesday, the committee would like to continue discussions and address some additional topics:

- Methods used for determination. Will BEAD be sharing their validated methods with states Ex. 5 Deliberative Process (DP)
- EPA Methods 537.1 and 533 are established and being used with some differences between them. What methodology would be appropriate for testing? **Ex. 5 Deliberative Process (DP)**